```
=> s bandwidth# or throughput#
         53922 BANDWIDTH#
         41201 THROUGHPUT#
         90855 BANDWIDTH# OR THROUGHPUT#
L1
=> s priority or priorities or weight#
         45106 PRIORITY
          5423 PRIORITIES
        792832 WEIGHT#
        827668 PRIORITY OR PRIORITIES OR WEIGHT#
L2
=> s 395/200.56 /cclst
          167 395/200.56 /CCLST
=> s 11 and 13
            52 L1 AND L3
=> s 14 and 12
            23 L4 AND L2
=> d ti,ab 1-
=> d his
     (FILE 'USPAT' ENTERED AT 11:42:36 ON 28 FEB 1999)
          90855 S BANDWIDTH# OR THROUGHPUT#
         827668 S PRIORITY OR PRIORITIES OR WEIGHT#
L2
            167 S 395/200.56 /CCLST
L3
              52 S L1 AND L3
L4
              23 S L4 AND L2
L5
=> s 14 /ti,ab
           914 BANDWIDTH#/TI
           5283 BANDWIDTH#/AB
           238 THROUGHPUT#/TI
           2172 THROUGHPUT#/AB
            167 395/200.56 /CCLST
             11 ((BANDWIDTH#/TI,AB OR THROUGHPUT#/TI,AB) AND (395/200.56
Lб
 /C
 CLS
                T))
 => d ti,ab 1-
 => d his
      (FILE 'USPAT' ENTERED AT 11:42:36 ON 28 FEB 1999)
          90855 S BANDWIDTH# OR THROUGHPUT#
 L1
          827668 S PRIORITY OR PRIORITIES OR WEIGHT#
 L2
             167 S 395/200.56 /CCLST
 L3
             52 S L1 AND L3
 L4
             23 S L4 AND L2
 L5
```

```
11 S L4 /TI,AB
L6
=> s 370/468 /cclst
    419 370/468 /CCLST
=> s 17 and 11
        291 L7 AND L1
=> s 18 and 12
   144 L8 AND L2
Ь9
=> s 19 /ti,ab
           419 370/468 /CCLST
           914 BANDWIDTH#/TI
          5283 BANDWIDTH#/AB
           238 THROUGHPUT#/TI
          2172 THROUGHPUT#/AB
           659 PRIORITY/TI
          3374 PRIORITY/AB
            29 PRIORITIES/TI
           297 PRIORITIES/AB
          4427 WEIGHT#/TI
         95506 WEIGHT#/AB
           11 (((370/468 /CCLST) AND (BANDWIDTH#/TI,AB OR
L10
THROUGHPUT#/TI,
               ) AND (PRIORITY/TI, AB OR PRIORITIES/TI, AB OR
WEIGHT#/TI,AB)
)
=> d ti,ab 1-
=> d his
     (FILE 'USPAT' ENTERED AT 11:42:36 ON 28 FEB 1999)
          90855 S BANDWIDTH# OR THROUGHPUT#
L1
         827668 S PRIORITY OR PRIORITIES OR WEIGHT#
L2
            167 S 395/200.56 /CCLST
\Gamma3
             52 S L1 AND L3
L4
             23 S L4 AND L2
L5
            11 S L4 /TI,AB
L6
            419 S 370/468 /CCLST
L7
            291 S L7 AND L1
\Gamma8
            144 S L8 AND L2
L9
             11 S L9 /TI,AB
L10
=> \dot{s} 370/477 / cclst
          259 370/477 /CCLST
 L11
 => s 111 and 11
          154 L11 AND L1
 L12
```

```
50 L12 AND L2
=> s 113 /ti,ab
           259 370/477 /CCLST
           914 BANDWIDTH#/TI
          5283 BANDWIDTH#/AB
           238 THROUGHPUT#/TI
          2172 THROUGHPUT#/AB
           659 PRIORITY/TI
          3374 PRIORITY/AB
            29 PRIORITIES/TI
           297 PRIORITIES/AB
          4427 WEIGHT#/TI
         95506 WEIGHT#/AB
             3 (((370/477 /CCLST) AND (BANDWIDTH#/TI,AB OR
THROUGHPUT#/TI,
AB)
               ) AND (PRIORITY/TI, AB OR PRIORITIES/TI, AB OR
WEIGHT#/TI, AB)
=> d ti,ab 1-
                                                        L14: 1 of 3
               5,359,592 [IMAGE AVAILABLE]
US PAT NO:
               **Bandwidth** and congestion control for queue channels
TITLE:
in
                 a cell switching communication controller
ABSTRACT:
A mechanism for buffering communication cells in a communication
controller, wherein a cell queuing circuit provides a cell loss
**priority** mechanism, and wherein the cell queuing circuit determines
service states for queue channels according to **bandwidth** allocation
parameters. The service states includes a serve.sub. -- now state, a
serve.sub.-- ok state, and a no.sub.-- serve state, such that a queue
channel is in the serve.sub. -- now state if the queue channel must be
serviced to maintain a minimum information rate parameter for the queue
channel, the serve.sub. -- ok state if the queue channel can be serviced
and not exceed a peak information rate parameter for the queue channel.
                                                        L14: 2 of 3
               5,132,966 [IMAGE AVAILABLE]
US PAT NO:
               Call control with transmission **priority** in a packet
TITLE:
                  communication network of an ATM type
ABSTRACT:
In a high-speed packet multiplex communication network including a
transmission line with a predetermined **bandwidth** and accommodating a
plurality of information sources, the sources having various packet
delivery rates over a range of between a peak rate and a lower rate than
an average rate and demanding various transport performances, the
 sources
 are preliminarily classified into a plurality of types according to
 transport performances required and different transmission
 **priorities**
 are assigned to the different types, respectively. **Bandwidths** of
 sources of first **priority** and second **priority** are determined
```

=> s 112 and 12

ones

corresponding to the peak rate and the average rate, respectively. A virtual \*\*bandwidth\*\* may be calculated for the second \*\*priority\*\* source as a value between the peak and average rates. In response to connection requests from the sources, each of the connection requests is admitted when a \*\*bandwidth\*\* defined by the \*\*priority\*\* of each source is accepted in a residual \*\*bandwidth\*\* of the predetermined \*\*bandwidth\*\*, and the packets from the source of the first \*\*priority\*\* are preferentially transmitted to the transmission line, packets of the second \*\*priority\*\* source are transmitted when packets of the first \*\*priority\*\* source are absent. Thus, high \*\*bandwidth\*\* efficiency is insured while the high transport performance of the first \*\*priority\*\* source is maintained.

US PAT NO: TITLE: 4,980,886 [IMAGE AVAILABLE] L14: 3 of 3

Communication system utilizing dynamically slotted

information

## ABSTRACT:

Burst switching apparatus for a hybrid switching and transmission system adapted to carry multimedia traffic components including voice and data in multi-slotted frames, in which components of the traffic to be transmitted from the sources thereof are assigned to respective selected slots in each frame to assure transmission of information generated by each active source within a predetermined \*\*bandwidth\*\*, and the \*\*bandwidth\*\* is reallocated as necessary to provide additional slots within each frame to the active sources on a frame-by-frame basis to accommodate the respective \*\*bandwidths\*\* required for the information generated by those sources from among the total available \*\*bandwidth\*\* of the system. The reallocation to provide additional slots is achieved by a combination of external control of \*\*bandwidth\*\* and dynamic allocation of \*\*bandwidth\*\*, by which the additional slots that are temporarily assigned to any active source are obtained from among those slots to which other sources have \*\*priority\*\*, on a frame-by-frame basis

for only so long as the sources having \*\*priority\*\* to the temporarily assigned slots are inactive.

=> s bandwidth# or throuput#

53922 BANDWIDTH# 9 THROUPUT#

L1 53931 BANDWIDTH# OR THROUPUT#

=> del 11

DELETE L1? (Y)/N:y

=> s (allocat? or distribut? or divid? or control?)(2a)(bandwidth# or throughput#)

43759 ALLOCAT?

489333 DISTRIBUT?

511907 DIVID?

1351700 CONTROL?

53922 BANDWIDTH#

41201 THROUGHPUT#

L1 4865 (ALLOCAT? OR DISTRIBUT? OR DIVID? OR CONTROL?) (2A) (BANDWIDT

H#

## OR THROUGHPUT#)

```
=> s priority or priorities or rank# or weight#
         45106 PRIORITY
          5423 PRIORITIES
         10982 RANK#
        792832 WEIGHT#
        832374 PRIORITY OR PRIORITIES OR RANK# OR WEIGHT#
L2
=> s 11 and 12
        1849 L1 AND L2
L3 ·
=> s 13 /ti,ab
           775 ALLOCAT?/TI
          4083 ALLOCAT?/AB
          9267 DISTRIBUT?/TI
         51582 DISTRIBUT?/AB
          2780 DIVID?/TI
         46881 DIVID?/AB
        117695 CONTROL?/TI
        354651 CONTROL?/AB
           914 BANDWIDTH#/TI
          5283 BANDWIDTH#/AB
           238 THROUGHPUT#/TI
          2172 THROUGHPUT#/AB
           474 (ALLOCAT?/TI,AB OR DISTRIBUT?/TI,AB OR DIVID?/TI,AB OR
CONT
ROL
                ?/TI,AB)(2A)(BANDWIDTH#/TI,AB OR THROUGHPUT#/TI,AB)
           659 PRIORITY/TI
          3374 PRIORITY/AB
            29 PRIORITIES/TI
           297 PRIORITIES/AB
            94 RANK#/TI
           714 RANK#/AB
          4427 WEIGHT#/TI
          95506 WEIGHT#/AB
            22 (((ALLOCAT?/TI,AB OR DISTRIBUT?/TI,AB OR DIVID?/TI,AB OR
L4
CO
NTR
                OL?/TI,AB)(2A)(BANDWIDTH#/TI,AB OR THROUGHPUT#/TI,AB))
AND
 (PR
                IORITY/TI, AB OR PRIORITIES/TI, AB OR RANK#/TI, AB OR
WEIGHT#/
TI,
                AB))
=> d ti,ab 1-
      (FILE 'USPAT' ENTERED AT 15:52:08 ON 28 FEB 1999)
            4865 S (ALLOCAT? OR DISTRIBUT? OR DIVID? OR
 L1
 CONTROL?) (2A) (BANDW
 IDT
          832374 S PRIORITY OR PRIORITIES OR RANK# OR WEIGHT#
 L2
            1849 S L1 AND L2
 L3
```

```
22 S L3 /TI,AB
L4
=> s server# (5a) 11
          9982 SERVER#
            27 SERVER# (5A) L1
=> s 15 and 12
            16 L5 AND L2
L6
=> d ti,ab 1-
=> d ti, kwic 5
=> s server#(5a)(allocat? or distribut? or divid? or arbit? or control?)
(5a) (bandwidth# or throughput#)
          9982 SERVER#
         43759 ALLOCAT?
        489333 DISTRIBUT?
        511907 DIVID?
        104813 ARBIT?
       1351700 CONTROL?
         53922 BANDWIDTH#
         41201 THROUGHPUT#
            38 SERVER#(5A)(ALLOCAT? OR DISTRIBUT? OR DIVID? OR ARBIT? OR
Ļ1
С
ONT
               ROL?) (5A) (BANDWIDTH# OR THROUGHPUT#)
=> s priority or priorities
         45106 PRIORITY
          5423 PRIORITIES
          46119 PRIORITY OR PRIORITIES
\Rightarrow s 11 and 12
            17 L1 AND L2
=> d ti,ab,kwic 1-
```